



POWER/MATE CORP.

163 CLAY ST., HACKENSACK, N. J. 07601

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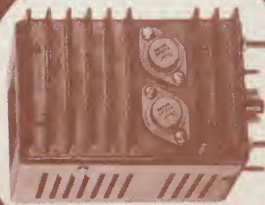
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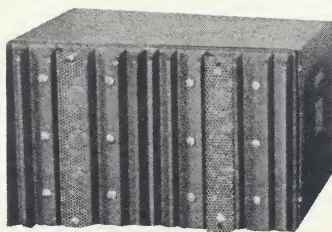
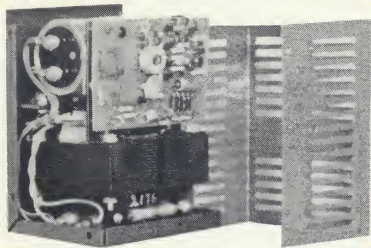
Hackensack, N. J.
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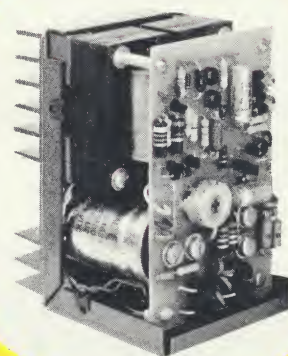
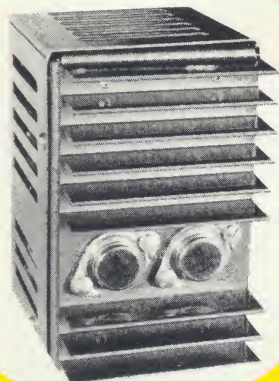
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CATALOG





GENERAL
146
CATALOG



POWER/
CORPORATION **MATE**

REGULATED POWER SUPPLY MODULES

POWER/MATE CORPORATION

HACKENSACK, NEW JERSEY 07601



Power/Mate Builds Power Supplies

- Select From Thousands Of Off-The-Shelf Models
- Outputs From Zero To 400 Volts, 50MA To 25 Amperes
- Short Circuit Proof, May Be Shorted Indefinitely, No Fuses Required
- Designed For Full Load Operation at 71°C, Without Additional Heat Sinking
- Internal Or External Voltage Control
- Remote Voltage Sensing Standard On Most Models



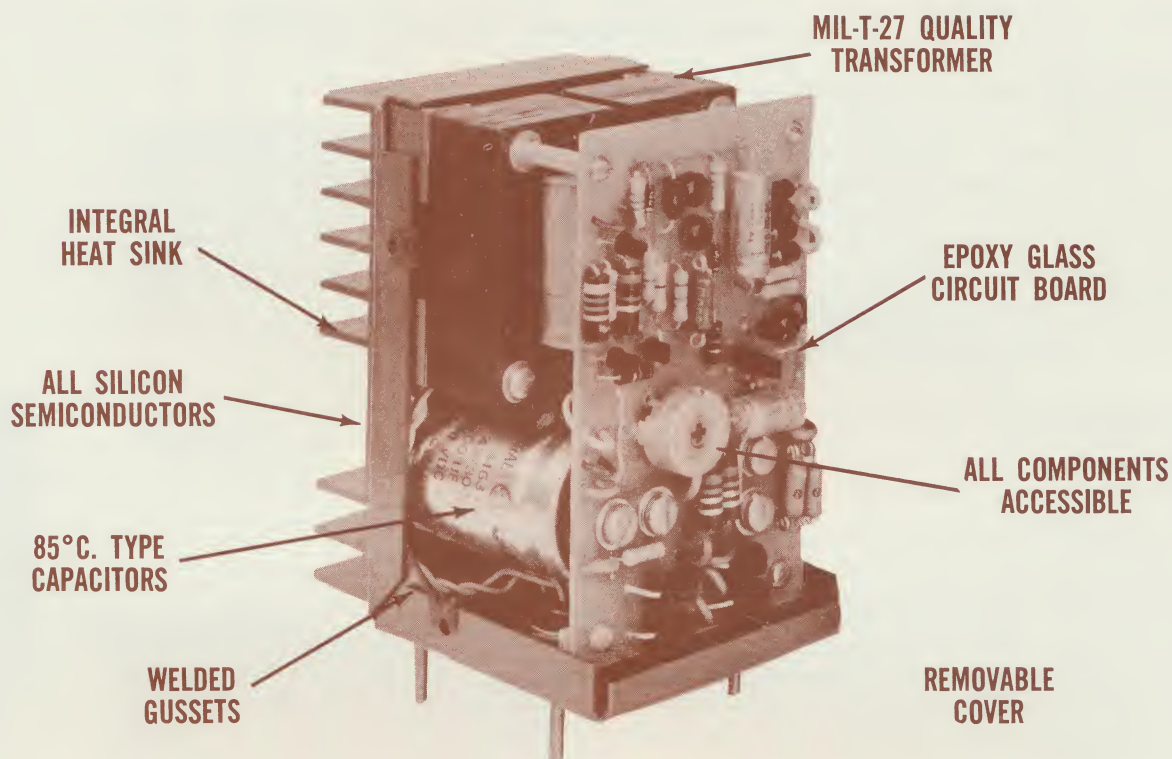
SHORT CIRCUIT PROOF ■ OVER 100,000 HOURS MTBF ■ ALL SILICON ■ CONTINUOUS
 G AT 71°C WITHOUT DERATING ■ NO HEAT SINK REQUIRED ■ AUTOMATIC OVERLOAD
 GED CONSTRUCTION ■ SHORT CIRCUIT PROOF ■ COMPONENTS ACCESSIBLE FOR EASY

5

**FIVE-YEAR
WARRANTY**

POWER/MATE CORP. warrants each product manufactured by them to be free from defects in material and workmanship. Our liability under the warranty is limited to servicing, adjusting, or replacing any product returned to the factory for that purpose and making good at the factory any part thereof which shall within three years after making delivery to the original purchaser be returned by the original purchaser to us with transportation charges prepaid and which our examination shall disclose to have been defective. In no case shall our liability exceed the original price.

The Way You Want Them



RATING AT 71°C WITHOUT DERATING ■ NO HEAT SINK REQUIRED ■ RUGGED CONSTRUCTION ■ RECOVERY ■ ALL SILICON ■ SHORT CIRCUIT PROOF ■ COMPONENTS ACCESSIBLE FOR MAINTENANCE ■ OVER 100,000 HOURS MTBF ■ ALL SILICON ■ AUTOMATIC OVERLOAD



POWER/MATE CORPORATION

163 CLAY STREET, HACKENSACK, NEW JERSEY 07601

(201) 343-6294

Warranty	2
RA and RB Series, 0.05% and 0.5% Regulation, Outputs to 400 Volts, 25 Amps.	4-7
DRA and DRB Series, Dual Outputs 3 to 76 Volts, 3 Amps.	8,9
RC and RD Series, 0.75% and 1.5% Regulation, Outputs 3 to 50 Volts, 1 Amp.	10
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Weights	14
Options, Accessories, Ordering	15
Engineering Sales Representatives	Back Cover

Regulation 0.05% or 0.5% • Voltages 0 to 400

Current Outputs to 25 Amps

All Silicon Semiconductors Throughout
 All Units Rated For Continuous Duty at -20° To $+71^{\circ}\text{C}$ Ambient
 Short Circuit Proof — May Be Shorted Indefinitely Without Damage
 Automatic Overload And Short Circuit Recovery
 No External Heat Sink Or Cooling Required Up To $+71^{\circ}\text{C}$
 MTBF — Over 100,000 Hours
 All Components Accessible And Replaceable For Maintenance
 Top Quality Components And Rugged Construction
 All Power Supplies Subjected To Rigorous QC Inspections

The RA and RB Series of modular power supplies provide regulated voltage outputs between 0 and 400 volts at output currents up to 25 amperes, at regulations of 0.05 or 0.5%, according to the model selected.

Silicon semiconductors are used exclusively in the power supply circuitry. This together with the internal heat sinking provided in the supply enables full load operation of the unit at ambient temperatures of 71°C without any additional cooling, heat sinking, and without derating.

The RA and RB Series power supplies are completely short circuit proof. The output may be short circuited indefinitely without damage. A unique circuit reduces the output current and voltage if the full load rating of the supply is exceeded. This not only protects the power supply, but serves to protect the load against further damage due to excessive current flow. The power supply automatically restores itself to normal operation after the short or overload is removed.

All components are accessible and replaceable in the field if required. All components are conservatively rated and are of the highest quality. For example, the electrolytic capacitors are 85°C types and the transformers are MIL-T-27 quality.

Connections at the connector permit either internal or remote adjustment of the output voltages. External connections also permit the remote sensing of the voltage directly at the load for improved overall load regulation on the RA Series.



SPECIFICATIONS

Input — 105-125V AC. 47-420 CPS.

Output — See Specific Model Listed

Regulation — $\pm 0.05\%$ or 2mv (whichever is greater) vs line and load for RA Series; $\pm 0.5\%$ vs line and load for RB Series

Ripple — Less than 0.002%, or 1mv RMS (whichever is greater) for RA Series; 0.01% or 5mv RMS for RB Series

Response Time — 50 Microseconds

Operating Ambient Temperature — -20° to $+71^{\circ}\text{C}$

Temperature Coefficient — 0.015%/C or 1.8mv, whichever is greater

Output Adjustment — Either internal or external as desired

Cooling — None required at specified ambients

Polarity — May be either positive, negative, or floating (up to 300 volts)

Overload Protection — Solid state short circuit and overload protected, instantaneous recovery and automatic reset

Mean Time Between Failures — 100,000 hours typical, calculated according to MIL Handbook 217A

Military Specifications — Designed to meet the environmental requirements of MIL-E-5272, and RFI requirements of MIL-I-6181

RA and RB SERIES SPECIFICATIONS

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OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE	0.05% REGULATION		0.5% REGULATION	
			PRICE	MODEL NO.	PRICE	MODEL NO.
0-3	0.375	R	\$115	RA2- 0.375	\$110	RB2- 0.375
	0.750	R	120	RA2- 0.750	110	RB2- 0.750
	1.5	R	150	RA2- 1.5	140	RB2- 1.5
	3.0	RH	190	RA2- 3.0	180	RB2- 3.0
	6.0	TH	230	RA2- 6.0	220	RB2- 6.0
	12.0	2TH	325	RA2-12.0	315	RB2-12.0
	25.0	4TH	425	RA2-25.0	415	RB2-25.0
3-5	0.375	R	70	RA4- 0.375	60	RB4- 0.375
	0.750	R	85	RA4- 0.750	75	RB4- 0.750
	1.5	R	105	RA4- 1.5	95	RB4- 1.5
	3.0	RH	135	RA4- 3.0	125	RB4- 3.0
	6.0	TH	180	RA4- 6.0	165	RB4- 6.0
	12.0	2TH	255	RA4-12.0	240	RB4-12.0
	25.0	4TH	360	RA4-25.0	345	RB4-25.0
5-7	0.375	R	70	RA6- 0.375	60	RB6- 0.375
	0.750	R	85	RA6- 0.750	75	RB6- 0.750
	1.5	R	105	RA6- 1.5	95	RB6- 1.5
	3.0	RH	135	RA6- 3.0	125	RB6- 3.0
	6.0	TH	180	RA6- 6.0	165	RB6- 6.0
	12.0	2TH	275	RA6-12.0	260	RB6-12.0
	25.0	4TH	405	RA6-25.0	390	RB6-25.0
7-9	0.200	R	65	RA8- 0.200	60	RB8- 0.200
	0.375	R	80	RA8- 0.375	70	RB8- 0.375
	0.750	R	95	RA8- 0.750	85	RB8- 0.750
	1.5	R	105	RA8- 1.5	95	RB8- 1.5
	3.0	RH	135	RA8- 3.0	125	RB8- 3.0
	6.0	TH	190	RA8- 6.0	175	RB8- 6.0
	12.0	2TH	280	RA8-12.0	265	RB8-12.0
	25.0	4TH	415	RA8-25.0	400	RB8-25.0
9-11	0.200	R	65	RA10- 0.200	60	RB10- 0.200
	0.375	R	80	RA10- 0.375	70	RB10- 0.375
	0.750	R	95	RA10- 0.750	85	RB10- 0.750
	1.5	R	105	RA10- 1.5	95	RB10- 1.5
	3.0	RH	135	RA10- 3.0	125	RB10- 3.0
	6.0	TH	195	RA10- 6.0	180	RB10- 6.0
	12.0	2TH	290	RA10-12.0	275	RB10-12.0
	25.0	4TH	425	RA10-25.0	410	RB10-25.0
11-13	0.200	N	65	RA12- 0.200	60	RB12- 0.200
	0.375	N	85	RA12- 0.375	75	RB12- 0.375
	0.750	R	95	RA12- 0.750	85	RB12- 0.750
	1.5	R	115	RA12- 1.5	105	RB12- 1.5
	3.0	RH	135	RA12- 3.0	125	RB12- 3.0
	6.0	TH	200	RA12- 6.0	190	RB12- 6.0
	12.0	2TH	290	RA12-12.0	275	RB12-12.0
	25.0	4TH	440	RA12-25.0	425	RB12-25.0
13-15	0.100	N	65	RA14- 0.100	60	RB14- 0.100
	0.200	N	75	RA14- 0.200	65	RB14- 0.200
	0.375	N	85	RA14- 0.375	75	RB14- 0.375
	0.750	R	100	RA14- 0.750	90	RB14- 0.750
	1.5	R	125	RA14- 1.5	115	RB14- 1.5
	3.0	TH	165	RA14- 3.0	155	RB14- 3.0
	6.0	2TH	210	RA14- 6.0	195	RB14- 6.0
OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE	0.05% REGULATION		0.5% REGULATION	
			PRICE	MODEL NO.	PRICE	MODEL NO.
13-15	12.0	3TH	\$ 295	RA14-12.0	\$280	RB14-12.0
	25.0	4TH	455	RA14-25.0	440	RB14-25.0
14-16	0.100	N	65	RA15- 0.100	60	RB15- 0.100
	0.200	N	75	RA15- 0.200	65	RB15- 0.200
	0.375	N	85	RA15- 0.375	75	RB15- 0.375
	0.750	R	100	RA15- 0.750	90	RB15- 0.750
	1.5	R	125	RA15- 1.5	115	RB15- 1.5
	3.0	TH	165	RA15- 3.0	145	RB15- 3.0
	6.0	2TH	210	RA15- 6.0	190	RB15- 6.0
	12.0	3TH	310	RA15-12.0	290	RB15-12.0
	25.0	5TH	455	RA15-25.0	440	RB15-25.0
15-17	0.100	N	65	RA16- 0.100	60	RB16- 0.100
	0.200	N	75	RA16- 0.200	65	RB16- 0.200
	0.375	N	85	RA16- 0.375	75	RB16- 0.375
	0.750	R	105	RA16- 0.750	95	RB16- 0.750
	1.5	R	125	RA16- 1.5	115	RB16- 1.5
	3.0	TH	170	RA16- 3.0	150	RB16- 3.0
	6.0	2TH	215	RA16- 6.0	200	RB16- 6.0
	12.0	3TH	325	RA16-12.0	310	RB16-12.0
	25.0	5TH	460	RA16-25.0	445	RB16-25.0
17-19	0.100	N	65	RA18- 0.100	60	RB18- 0.100
	0.200	N	75	RA18- 0.200	65	RB18- 0.200
	0.375	N	85	RA18- 0.375	75	RB18- 0.375
	0.750	R	105	RA18- 0.750	95	RB18- 0.750
	1.5	R	125	RA18- 1.5	115	RB18- 1.5
	3.0	TH	170	RA18- 3.0	150	RB18- 3.0
	6.0	2TH	230	RA18- 6.0	215	RB18- 6.0
	12.0	3TH	335	RA18-12.0	320	RB18-12.0
	25.0	5TH	460	RA18-25.0	445	RB18-25.0
19-22	0.100	N	65	RA20- 0.100	60	RB20- 0.100
	0.200	N	75	RA20- 0.200	65	RB20- 0.200
	0.375	N	85	RA20- 0.375	75	RB20- 0.375
	0.750	R	105	RA20- 0.750	95	RB20- 0.750
	1.5	R	125	RA20- 1.5	115	RB20- 1.5
	3.0	TH	170	RA20- 3.0	150	RB20- 3.0
	6.0	2TH	235	RA20- 6.0	220	RB20- 6.0
	12.0	3TH	340	RA20-12.0	325	RB20-12.0
	25.0	5TH	465	RA20-25.0	450	RB20-25.0
22-25	0.100	N	65	RA23- 0.100	60	RB23- 0.100
	0.200	N	75	RA23- 0.200	65	RB23- 0.200
	0.375	R	85	RA23- 0.375	75	RB23- 0.375
	0.750	R	110	RA23- 0.750	100	RB23- 0.750
	1.5	RH	130	RA23- 1.5	120	RB23- 1.5
	3.0	TH	175	RA23- 3.0	160	RB23- 3.0
	6.0	2TH	240	RA23- 6.0	225	RB23- 6.0
	12.0	3TH	345	RA23-12.0	330	RB23-12.0
	25.0	5TH	475	RA23-25.0	460	RB23-25.0
25-28	0.100	N	65	RA26- 0.100	60	RB26- 0.100
	0.200	R	75	RA26- 0.200	65	RB26- 0.200
	0.375	R	85	RA26- 0.375	75	RB26- 0.375
	0.750	R	110	RA26- 0.750	100	RB26- 0.750
	1.5	T	140	RA26- 1.5	130	RB26- 1.5
	3.0	TH	180	RA26- 3.0	165	RB26- 3.0
	6.0	2TH	255	RA26- 6.0	240	RB26- 6.0
	12.0	4TH	370	RA26-12.0	355	RB26-12.0

OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE	0.05% REGULATION		0.5% REGULATION	
			PRICE	MODEL NO.	PRICE	MODEL NO.
26.5-29.5	0.100	N	\$65	RA28- 0.100	\$60	RB28- 0.100
	0.200	R	115	RA28- 0.200	105	RB28- 0.200
	0.375	R	80	RA28- 0.375	70	RB28- 0.375
	0.750	R	90	RA28- 0.750	80	RB28- 0.750
	1.5	T	140	RA28- 1.5	130	RB28- 1.5
	3.0	TH	180	RA28- 3.0	170	RB28- 3.0
	6.0	2TH	255	RA28- 6.0	240	RB28- 6.0
	12.0	4TH	370	RA28-12.0	355	RB28-12.0
28-32	0.050	N	60	RA30- 0.050	60	RB30- 0.050
	0.100	N	70	RA30- 0.100	60	RB30- 0.100
	0.200	R	80	RA30- 0.200	70	RB30- 0.200
	0.375	R	90	RA30- 0.375	80	RB30- 0.375
	0.750	R	115	RA30- 0.750	105	RB30- 0.750
	1.5	T	140	RA30- 1.5	130	RB30- 1.5
	3.0	TH	185	RA30- 3.0	175	RB30- 3.0
	6.0	2TH	265	RA30- 6.0	250	RB30- 6.0
32-36	12.0	4TH	380	RA30-12.0	365	RB30-12.0
	0.050	N	60	RA34- 0.050	60	RB34- 0.050
	0.100	N	70	RA34- 0.100	60	RB34- 0.100
	0.200	R	85	RA34- 0.200	75	RB34- 0.200
	0.375	R	95	RA34- 0.375	85	RB34- 0.375
	0.750	R	115	RA34- 0.750	105	RB34- 0.750
	1.5	T	150	RA34- 1.5	140	RB34- 1.5
	3.0	TH	200	RA34- 3.0	190	RB34- 3.0
36-40	6.0	2TH	285	RA34- 6.0	270	RB34- 6.0
	12.0	4TH	400	RA34-12.0	385	RB34-12.0
	0.050	N	65	RA38- 0.050	60	RB38- 0.050
	0.100	N	75	RA38- 0.100	65	RB38- 0.100
	0.200	R	85	RA38- 0.200	75	RB38- 0.200
	0.375	R	100	RA38- 0.375	90	RB38- 0.375
	0.750	R	115	RA38- 0.750	105	RB38- 0.750
	1.5	T	160	RA38- 1.5	145	RB38- 1.5
40-45	3.0	TH	215	RA38- 3.0	200	RB38- 3.0
	6.0	2TH	310	RA38- 6.0	295	RB38- 6.0
	12.0	4TH	450	RA38-12.0	435	RB38-12.0
	0.050	N	70	RA42- 0.050	60	RB42- 0.050
	0.100	N	80	RA42- 0.100	70	RB42- 0.100
	0.200	R	90	RA42- 0.200	80	RB42- 0.200
	0.375	R	105	RA42- 0.375	95	RB42- 0.375
	0.750	T	120	RA42- 0.750	110	RB42- 0.750
45-50	1.5	T	170	RA42- 1.5	160	RB42- 1.5
	3.0	TH	225	RA42- 3.0	210	RB42- 3.0
	6.0	2TH	315	RA42- 6.0	300	RB42- 6.0
	12.0	4TH	455	RA42-12.0	440	RB42-12.0
	0.050	N	70	RA47- 0.050	60	RB47- 0.050
	0.100	N	80	RA47- 0.100	70	RB47- 0.100
	0.200	R	90	RA47- 0.200	80	RB47- 0.200
	0.375	R	105	RA47- 0.375	95	RB47- 0.375
	0.750	T	125	RA47- 0.750	115	RB47- 0.750
	1.5	T	170	RA47- 1.5	160	RB47- 1.5
	3.0	TH	230	RA47- 3.0	215	RB47- 3.0
	6.0	3TH	320	RA47- 6.0	305	RB47- 6.0
	12.0	5TH	465	RA47-12.0	450	RB47-12.0

OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE	0.05% REGULATION		0.5% REGULATION	
			PRICE	MODEL NO.	PRICE	MODEL NO.
50-56	0.050	N	\$ 80	RA53- 0.050	\$ 70	RB53- 0.050
	0.100	N	90	RA53- 0.100	80	RB53- 0.100
	0.200	R	105	RA53- 0.200	95	RB53- 0.200
	0.375	R	115	RA53- 0.375	105	RB53- 0.375
	0.750	T	135	RA53- 0.750	125	RB53- 0.750
	1.5	TH	170	RA53- 1.5	155	RB53- 1.5
	3.0	TH	230	RA53- 3.0	215	RB53- 3.0
	6.0	3TH	325	RA53- 6.0	310	RB53- 6.0
56-62	0.050	N	85	RA59- 0.050	75	RB59- 0.050
	0.100	R	95	RA59- 0.100	85	RB59- 0.100
	0.200	R	110	RA59- 0.200	100	RB59- 0.200
	0.375	R	120	RA59- 0.375	110	RB59- 0.375
	0.750	T	140	RA59- 0.750	130	RB59- 0.750
	1.5	TH	210	RA59- 1.5	195	RB59- 1.5
	3.0	2TH	275	RA59- 3.0	255	RB59- 3.0
	6.0	3TH	385	RA59- 6.0	370	RB59- 6.0
62-69	0.050	R	85	RA65- 0.050	75	RB65- 0.050
	0.100	R	95	RA65- 0.100	85	RB65- 0.100
	0.200	R	110	RA65- 0.200	100	RB65- 0.200
	0.375	R	120	RA65- 0.375	110	RB65- 0.375
	0.750	T	140	RA65- 0.750	130	RB65- 0.750
	1.5	TH	215	RA65- 1.5	200	RB65- 1.5
	3.0	2TH	315	RA65- 3.0	300	RB65- 3.0
	6.0	3TH	420	RA65- 6.0	405	RB65- 6.0
69-76	0.050	R	90	RA72- 0.050	80	RB72- 0.050
	0.100	R	100	RA72- 0.100	90	RB72- 0.100
	0.200	R	115	RA72- 0.200	105	RB72- 0.200
	0.375	T	125	RA72- 0.375	115	RB72- 0.375
	0.750	T	150	RA72- 0.750	140	RB72- 0.750
	1.5	TH	250	RA72- 1.5	235	RB72- 1.5
	3.0	2TH	320	RA72- 3.0	305	RB72- 3.0
	6.0	3TH	420	RA72- 6.0	405	RB72- 6.0
76-84	0.050	R	95	RA80- 0.050	85	RB80- 0.050
	0.100	R	105	RA80- 0.100	95	RB80- 0.100
	0.200	R	120	RA80- 0.200	110	RB80- 0.200
	0.375	T	135	RA80- 0.375	125	RB80- 0.375
	0.750	T	165	RA80- 0.750	150	RB80- 0.750
	1.5	TH	255	RA80- 1.5	235	RB80- 1.5
	3.0	2TH	325	RA80- 3.0	310	RB80- 3.0
	6.0	4TH	440	RA80- 6.0	425	RB80- 6.0
84-93	0.050	R	100	RA88- 0.050	90	RB88- 0.050
	0.100	R	110	RA88- 0.100	100	RB88- 0.100
	0.200	R	130	RA88- 0.200	120	RB88- 0.200
	0.375	T	145	RA88- 0.375	135	RB88- 0.375
	0.750	T	175	RA88- 0.750	165	RB88- 0.750
	1.5	TH	275	RA88- 1.5	260	RB88- 1.5
	0.050	R	105	RA98- 0.050	95	RB98- 0.050
	0.100	R	115	RA98- 0.100	105	RB98- 0.100
93-103	0.200	R	130	RA98- 0.200	120	RB98- 0.200
	0.375	T	160	RA98- 0.375	145	RB98- 0.375
	0.750	T	225	RA98- 0.750	210	RB98- 0.750
	1.5	TH	285	RA98- 1.5	270	RB98- 1.5

RA and RB SERIES SPECIFICATIONS

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OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE	0.05% REGULATION		0.5% REGULATION	
			PRICE	MODEL NO.	PRICE	MODEL NO.
103-114	0.050	R	\$115	RA108- 0.050	\$105	RB108- 0.050
	0.100	R	125	RA108- 0.100	115	RB108- 0.100
	0.200	R	135	RA108- 0.200	130	RB108- 0.200
	0.375	T	185	RA108- 0.375	160	RB108- 0.375
	0.750	T	260	RA108- 0.750	245	RB108- 0.750
	1.5	2TH	340	RA108- 1.5	325	RB108- 1.5
114-126	0.050	R	115	RA120- 0.050	105	RB120- 0.050
	0.100	R	135	RA120- 0.100	125	RB120- 0.100
	0.200	R	160	RA120- 0.200	145	RB180- 0.200
	0.375	T	190	RA120- 0.375	175	RB120- 0.375
	0.750	T	260	RA120- 0.750	245	RB120- 0.750
	1.5	2TH	340	RA120- 1.5	325	RB120- 1.5
126-139	0.050	R	125	RA132- 0.050	115	RB132- 0.050
	0.100	R	145	RA132- 0.100	135	RB132- 0.100
	0.200	R	160	RA132- 0.200	145	RB132- 0.200
	0.375	T	200	RA132- 0.375	185	RB132- 0.375
	0.750	TH	300	RA132- 0.750	285	RB132- 0.750
139-153	0.050	R	125	RA146- 0.050	115	RB146- 0.050
	0.100	R	145	RA146- 0.100	135	RB146- 0.100
	0.200	R	160	RA146- 0.200	145	RB146- 0.200
	0.375	T	200	RA146- 0.375	185	RB146- 0.375
	0.750	TH	300	RA146- 0.750	285	RB146- 0.750
153-168	0.050	R	130	RA160- 0.050	120	RB160- 0.050
	0.100	R	160	RA160- 0.100	145	RB160- 0.100
	0.200	R	170	RA160- 0.200	160	RB160- 0.200
	0.375	T	200	RA160- 0.375	185	RB160- 0.375
	0.750	TH	300	RA160- 0.750	285	RB160- 0.750
168-185	0.050	R	135	RA176- 0.050	125	RB176- 0.050
	0.100	R	165	RA176- 0.100	155	RB176- 0.100
	0.200	T	205	RA176- 0.200	190	RB176- 0.200
	0.375	T	250	RA176- 0.375	235	RB176- 0.375
	0.750	TH	340	RA176- 0.750	325	RB176- 0.750

OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE	0.05% REGULATION		0.5% REGULATION	
			PRICE	MODEL NO.	PRICE	MODEL NO.
185-204	0.050	R	\$140	RA194- 0.050	\$130	RB194- 0.050
	0.100	R	175	RA194- 0.100	165	RB194- 0.100
	0.200	T	230	RA194- 0.200	215	RB194- 0.200
	0.375	T	315	RA194- 0.375	300	RB194- 0.375
	0.750	TH	400	RA194- 0.750	385	RB194- 0.750
204-225	0.050	R	140	RA214- 0.050	130	RB214- 0.050
	0.100	R	175	RA214- 0.100	165	RB214- 0.100
	0.200	T	230	RA214- 0.200	215	RB214- 0.200
	0.375	T	315	RA214- 0.375	300	RB214- 0.375
225-250	0.050	R	155	RA236- 0.050	145	RB236- 0.050
	0.100	R	195	RA236- 0.100	185	RB236- 0.100
	0.200	T	260	RA236- 0.200	245	RB236- 0.200
	0.375	TH	350	RA236- 0.375	335	RB236- 0.375
250-275	0.050	R	160	RA262- 0.050	150	RB262- 0.050
	0.100	T	210	RA262- 0.100	195	RB262- 0.100
	0.200	T	280	RA262- 0.200	265	RB262- 0.200
	0.375	TH	365	RA262- 0.375	350	RB262- 0.375
275-315	0.050	T	175	RA295- 0.050	160	RB295- 0.050
	0.100	T	235	RA295- 0.100	220	RB295- 0.100
	0.200	T	315	RA295- 0.200	300	RB295- 0.200
	0.375	TH	390	RA295- 0.375	375	RB295- 0.375
315-340	0.050	T	180	RA327- 0.050	170	RB327- 0.050
	0.100	T	245	RA327- 0.100	230	RB327- 0.100
	0.200	T	330	RA327- 0.200	315	RB327- 0.200
	0.375	TH	415	RA327- 0.375	400	RB327- 0.375
340-370	0.050	T	190	RA355- 0.050	180	RB355- 0.050
	0.100	T	255	RA355- 0.100	240	RB355- 0.100
	0.200	T	340	RA355- 0.200	325	RB355- 0.200
	0.375	TH	425	RA355- 0.375	410	RB355- 0.375
370-400	0.050	T	200	RA385- 0.050	190	RB385- 0.050
	0.100	T	265	RA385- 0.100	250	RB385- 0.100
	0.200	T	350	RA385- 0.200	335	RB385- 0.200
	0.375	TH	435	RA385- 0.375	420	RB385- 0.375



Dual Output for Logic Circuits and Equipment**Regulation 0.05% or 0.5%**

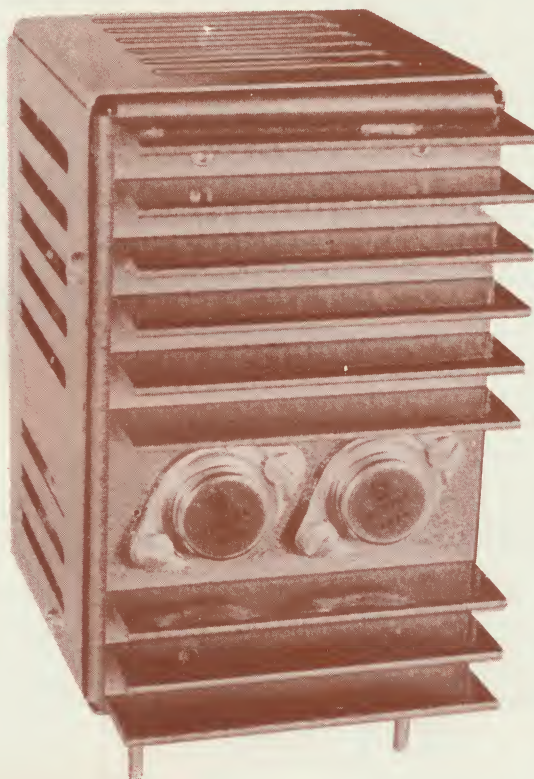
All Silicon Semiconductors Throughout
 All Units Rated For Continuous Duty at -20° To $+71^{\circ}\text{C}$ Ambient
 Short Circuit Proof — May Be Shorted Indefinitely Without Damage
 Automatic Overload And Short Circuit Recovery
 No External Heat Sink Or Cooling Required Up To $+71^{\circ}\text{C}$
 MTBF — Over 100,000 Hours
 All Components Accessible And Replaceable For Maintenance
 Top Quality Components And Rugged Construction
 All Power Supplies Subjected To Rigorous QC Inspections

The DRA and DRB Series of Dual Output Power Supply Modules provides users of logic circuits and equipment a convenient dual output supply, all in one compact package. This group of supplies provide a choice of thousands of dual voltage and current combinations. These are listed on the following page.

These supplies have retained all of the features of our standard RA and RB Series, i.e., all silicon semiconductors, 71°C full load operation, no heat sinking required, and conservative design. The output current foldback circuit incorporated in these supplies actually reduces the power dissipated in the supply under short circuit and overload conditions, making the supply completely immune to overloads.

The Dual DRA and DRB Series of supplies are contained in the standard RH Case. This case has a removable perforated cover which provides complete access to all components. The input/output connections are made through an eleven pin "octal" type of plug. Connections at this plug permit the remote sensing of the voltage directly at the load for improved over-all regulation on the DRA Series.

Any combination of two supplies listed may be ordered as a dual supply, providing the case size factor noted for each supply adds up to less than 20 for the pair. See HOW TO ORDER for an example.

**HOW TO ORDER**

Note the Case Size Factor in the column for each of the two power supplies desired. Add these two numbers together. If the sum is 20 or less, then the supplies selected can be supplied as standard units in the DRA or DRB Series.

The model number for the dual supply consists of the prefix DRA (for 0.05% models) or DRB (for 0.5% models), followed by the voltage and current rating of each supply. Specify the higher voltage unit first. For example, a dual 16V, 0.375A, and a 10V, 0.750A supply in the DRA series is described by the following model number: DRA 16-0.375/10-0.750.

If the sum of the two Case Size Factors exceeds 20, consult the factory or our local representative in your area. We can probably supply it but in a different case size.

The cost of the dual module is the sum of the costs of the individual supplies selected. For example, the price of a dual module model DRA16-0.375/10-0.750 is the sum of \$85 and \$95, or \$180.

Input: 105-125V, 47-420 CPS

Output: See Specific Model

Regulation: $\pm 0.05\%$ vs line & load for DRA Series; $\pm 0.5\%$ vs line & load for DRB Series

Ripple: Less than 0.002%, or 1mV RMS whichever is greater for DRA Series; less than 0.01%, or 5mV RMS whichever is greater, for DRB Series

Operating Ambient Temperature: -20 to $+71^{\circ}\text{C}$

Cooling: None required at specified ambient temperatures

Polarity: May be either positive, negative or floating (up to 300V) each supply independent

Overload Protection: Solid state short circuit and overload protected instantaneous recovery and automatic reset.

DRA and DRB SERIES SPECIFICATIONS

PIMIC

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OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE FACTOR	DRA PRICE	DRB PRICE	MODEL NO. (See how to order)	OUTPUT VOLTAGE ADJUST RANGE	OUTPUT CURRENT (AMPS)	CASE SIZE FACTOR	DRA PRICE	DRB PRICE	MODEL NO. (See how to order)
3-5 see note 1	0.375	4	\$ 60	\$ 60	4-0.375	25-28	0.100	1.4	\$ 65	\$ 60	26-0.100
	0.750	7	75	75	4-0.750		0.200	2.8	75	65	26-0.200
	1.5	13	95	95	4-1.5		0.375	5.5	85	75	26-0.375
5-7 see note 1	0.200	2	60	60	6-0.200		0.750	10.5	110	100	26-0.750
	0.375	4	60	60	6-0.375	26.5-29.5	0.100	1.5	65	60	28-0.100
	0.750	7	75	75	6-0.750		0.200	3	80	70	28-0.200
	1.5	13	95	95	6-1.5		0.375	6	90	80	28-0.375
7-9 see note 1	0.200	2	60	60	8-0.200		0.750	12.0	115	105	28-0.750
	0.375	4	60	60	8-0.375	28-32	0.050	0.8	60	60	30-0.050
	0.750	8	75	75	8-0.750		0.100	1.6	70	60	30-0.100
	1.5	15	95	95	8-1.5		0.200	3.2	80	70	30-0.200
9-11	0.200	2	65	60	10-0.200		0.375	6	90	80	30-0.375
	0.375	4	80	70	10-0.375		0.750	12	115	105	30-0.750
	0.750	8	95	85	10-0.750	32-36	0.050	0.9	60	60	34-0.050
	1.5	15	105	95	10-1.5		0.100	1.7	70	60	34-0.100
11-13	0.100	1	60	60	12-0.100		0.200	3.4	85	75	34-0.200
	0.200	2	65	60	12-0.200		0.375	6	95	85	34-0.375
	0.375	4	85	75	12-0.375	36-40	0.750	12.5	115	105	34-0.750
	0.750	8	95	85	12-0.750		0.050	0.9	65	60	38-0.050
13-15	1.5	16	115	105	12-1.5		0.100	1.7	75	65	38-0.100
	0.100	1	65	60	14-0.100		0.200	3.5	85	75	38-0.200
	0.200	2	75	65	14-0.200	40-45	0.375	6.5	100	90	38-0.375
	0.375	4	85	75	14-0.375		0.750	13	115	105	38-0.750
14-16	0.750	8	100	90	14-0.750		0.050	1	70	60	42-0.050
	1.5	16	125	115	14-1.5		0.100	2	80	70	42-0.100
15-17	0.100	1	65	60	15-0.100	45-50	0.200	4	90	80	42-0.200
	0.200	2	75	65	15-0.200		0.375	7.5	105	95	42-0.375
	0.375	4	85	75	15-0.375		0.750	15	120	110	42-0.750
	0.750	8	100	90	15-0.750	50-56	0.050	1	70	60	47-0.050
17-19	1.5	16	125	115	15-1.5		0.100	2	80	70	47-0.100
	0.100	1	65	60	16-0.100		0.200	4	90	80	47-0.200
	0.200	2	75	65	16-0.200		0.375	7.5	105	95	47-0.375
19-22	0.375	4	85	75	16-0.375	56-62	0.750	15	125	115	47-0.750
	0.750	8	105	95	16-0.750		0.050	1	70	65	53-0.050
	1.5	17	125	115	16-1.5		0.100	2	80	70	53-0.100
							0.200	4	90	80	53-0.200
22-25							0.375	7.5	105	95	53-0.375
	0.100	1.3	65	60	20-0.100	62-69	0.050	1.3	85	75	59-0.050
	0.200	2.6	75	65	20-0.200		0.100	2.5	95	85	59-0.100
	0.375	5	85	75	20-0.375		0.200	5	110	100	59-0.200
	0.750	10	105	95	20-0.750		0.375	9	120	110	59-0.375
						69-76	0.050	1.4	85	75	65-0.050
	0.100	1.4	65	60	23-0.100		0.100	2.7	95	85	65-0.100
	0.200	2.8	75	65	23-0.200		0.200	5.5	110	100	65-0.200
	0.375	5.5	85	75	23-0.375		0.375	10	120	110	65-0.375
	0.750	10	110	100	23-0.750		0.050	1.4	90	80	72-0.050
							0.100	2.7	100	90	72-0.100
							0.200	5.5	115	105	72-0.200
							0.375	10	125	115	72-0.375

Note: 1: These supplies have 0.5% regulation but may be supplied in combination with any of the supplies listed.

Regulation 0.75% or 1.5% • Voltages 3 to 50
Current Output to 1 Amp

All Silicon Semiconductors Throughout
 All Units Rated For Continuous Duty at -20° To $+71^{\circ}\text{C}$ Ambient
 Short Circuit Proof — May Be Shorted Indefinitely Without Damage
 Automatic Overload And Short Circuit Recovery
 No External Heat Sink Or Cooling Required Up To $+71^{\circ}\text{C}$
 MTBF — Over 100,000 Hours
 All Components Accessible And Replaceable For Maintenance
 Top Quality Components And Rugged Construction
 All Power Supplies Subjected To Rigorous QC Inspections

The RC and RD Series of module power supplies are low cost units that feature the same high quality construction and components used in our other series of power supply modules. The regulation and ripple listed in the specifications are adequate to permit their use in all but the more critical applications. The low cost of these modules is the direct result of the wide acceptance that these modules have found throughout the industry. All of the modules listed are available from stock.

Silicon semiconductors are used exclusively in the power supply circuitry. This together with the internal heat sinking provided in the supply, enables full load operation of the unit at ambient temperatures of 71 degrees C without any additional cooling, heat sinking, and without derating.

All components in the supply are readily accessible by removing the cover, and are replaceable in the field should it ever be necessary. Components are conservatively rated. Electrolytic capacitors are 85 degree C types, and the transformer is MIL-T-27 quality.

The RC and RD Series modules are completely short-circuit proof. A solid-state current fold-back circuit makes the unit immune to overloads or short circuits. The unit automatically resets when the overload or short is removed.

All of the RC and RD series modules are housed in a rugged $3\frac{1}{4} \times 3\frac{1}{4} \times 5$ inch (R style case) with a standard octal plug for the input output connections.



Input — 105-125V AC, 47-420 CPS

Output — See specific model listed

Regulation — $\pm 0.75\%$ vs line & load for RC Series
 $\pm 1.5\%$ vs line & load for RD Series

Ripple — Less than 4MV RMS for RC Series
 Less than 8MV RMS for RD Series

Operating Ambient Temperature — -20 to $+71^{\circ}\text{C}$

Output Adjustment — Adjusted by means of internal pot

Cooling — None required within specified ambients

Polarity — May be either positive, negative or floating up to 300 volts

Overload Protection — Short circuit protected, autoreset

OUTPUT VOLTAGE RANGE	OUTPUT CURRENT AMPS	0.75% REGULATION		1.5% REGULATION	
		MODEL	PRICE	MODEL	PRICE
3-7	1.0	RC-5	\$65.00	RD-5	\$55.00
7-11	1.0	RC-9		RD-9	
11-13	1.0	RC-12		RD-12	
13-16	0.5	RC-15		RD-15	
16-21	0.5	RC-19	All Models	RD-19	All Models
21-26	0.5	RC-24		RD-24	
26-31	0.5	RC-28		RD-28	
31-37	0.5	RC-34		RD-34	
37-43	0.5	RC-40		RD-40	
43-50	0.5	RC-48		RD-48	

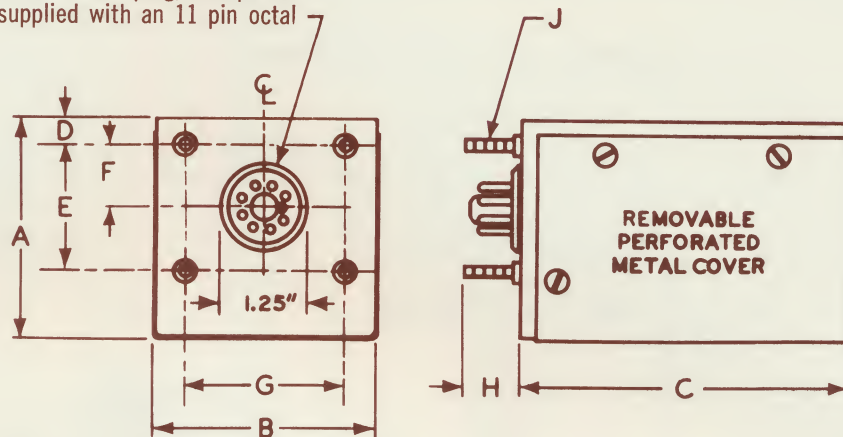
MECHANICAL DATA

PIMIC

11

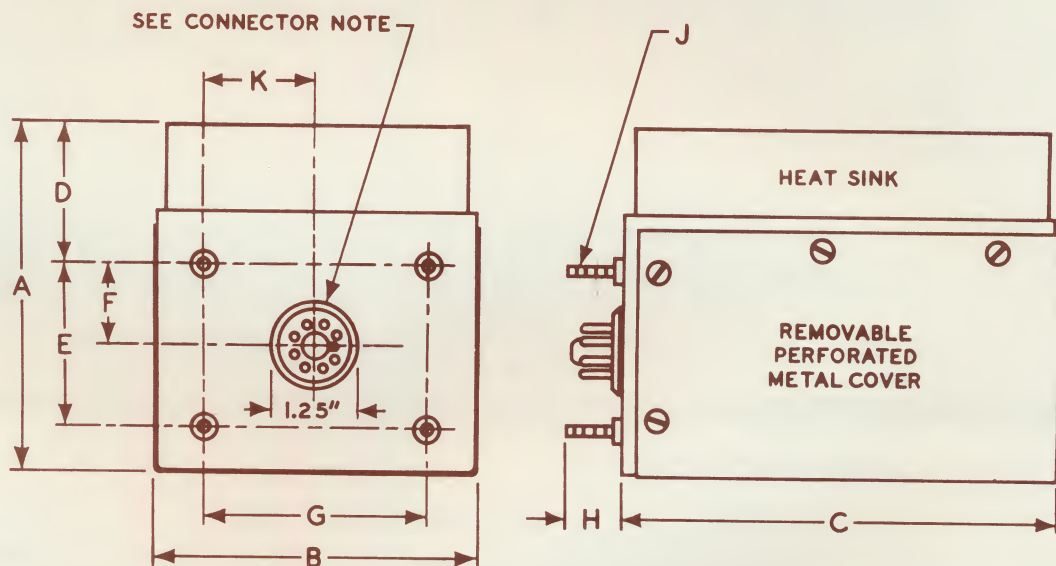
CONNECTOR NOTE: All modules over six amperes are normally supplied with solder type connector. All modules six amperes and less are normally supplied with an octal plug, except for dual output modules. These are supplied with an 11 pin octal type of plug.

CASE STYLES N R T



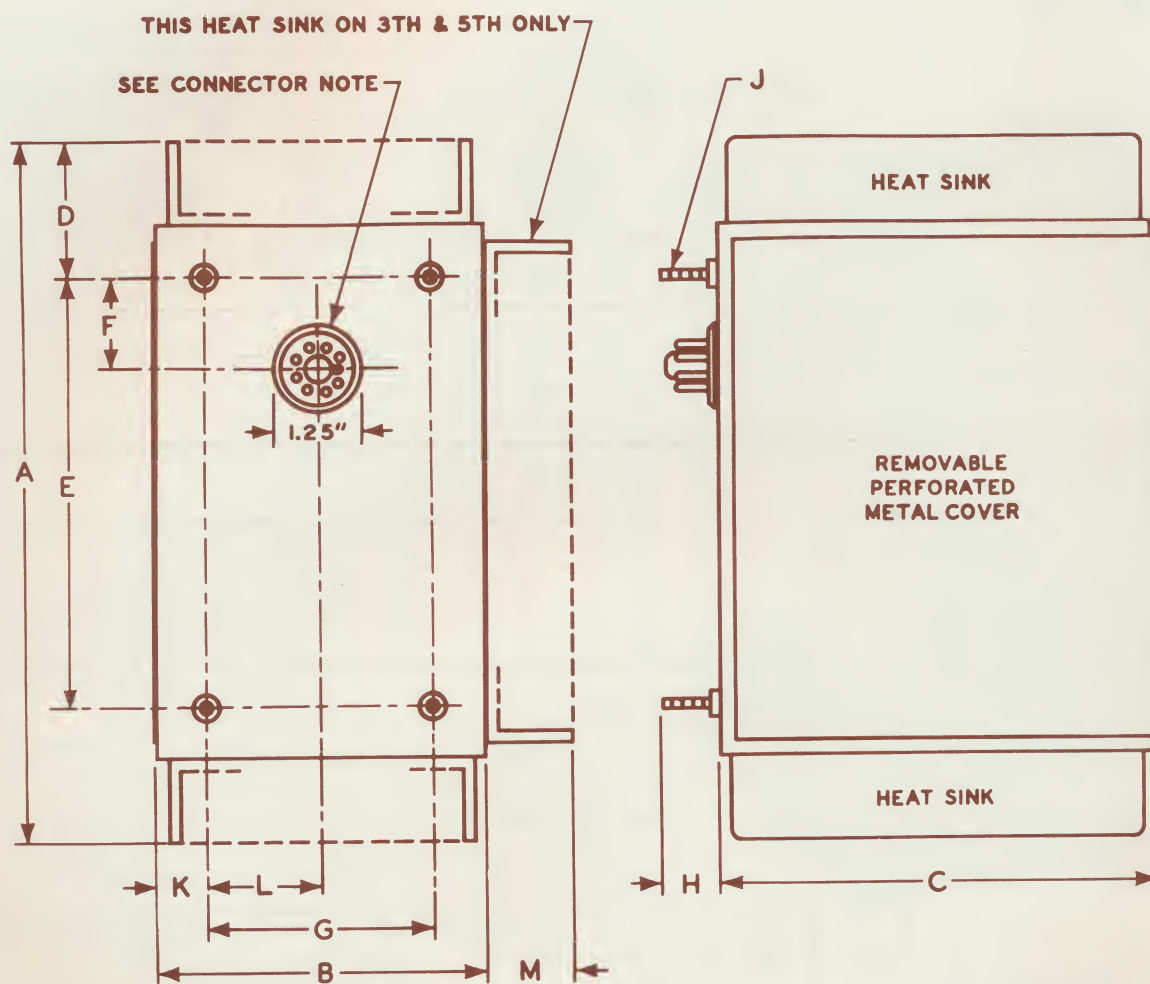
CASE STYLE	A	B	C	D	E	F	G	H	J
N	2.5	3.0	4.25	0.406	1.75	0.875	2.25	0.69	6-32
R	3.25	3.25	5.0	0.350	1.86	0.930	2.296	0.69	6-32
T	4.0	5.0	6.56	0.750	2.75	1.375	3.437	0.625	10-32

CASE STYLES RH TH BRH



CASE STYLE	A	B	C	D	E	F	G	H	J	K
RH	4.125	3.25	5.0	1.22	1.86	0.93	2.296	0.69	6-32	1.148
TH	5.25	5.0	6.56	2.063	2.75	1.375	3.437	0.625	10-32	1.718
BRH	4.125	5.0	5.5	1.25	2.50	1.25	4.156	0.69	6-32	.656

CASE STYLES 2TH 3TH 4TH 5TH

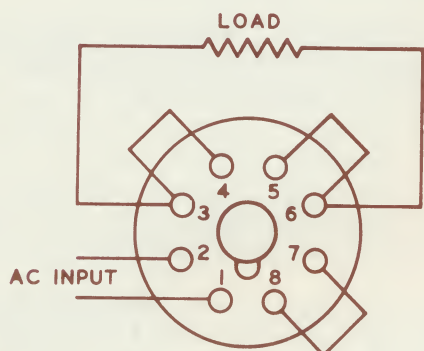


CONNECTOR NOTE: All modules over six amperes are normally supplied with solder type connector. All modules six amperes and less are normally supplied with an octal plug, except for dual output modules. These are supplied with an 11 pin octal type of plug.

CASE DIMENSIONS IN INCHES

CASE STYLE	A	B	C	D	E	F	G	H	J	K	L	M
2TH	10.75	5.0	6.5	2.125	6.5	1.375	3.437	0.625	10-32	0.781	1.719	
3TH	10.75	5.0	6.5	2.125	6.5	1.375	3.437	0.625	10-32	0.781	1.719	1.25
4TH	10.75	10.0	6.5	2.125	6.5	1.375	8.438	0.906	¼-20	0.781	1.719	
5TH	10.75	10.0	6.5	2.125	6.5	1.375	8.438	0.906	¼-20	0.781	1.719	1.25

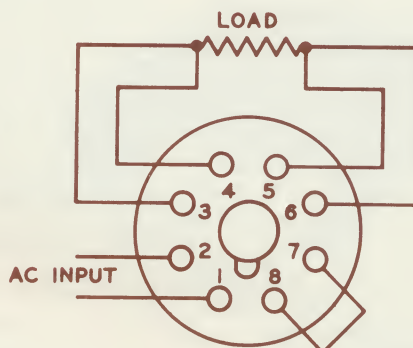
LOCAL SENSING, INTERNAL ADJUST



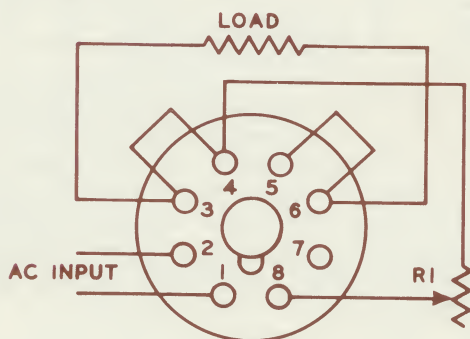
RA SERIES

SEE NOTE

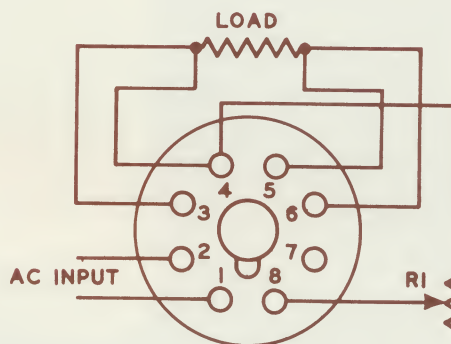
REMOTE SENSING, INTERNAL ADJUST



LOCAL SENSING, EXTERNAL ADJUST



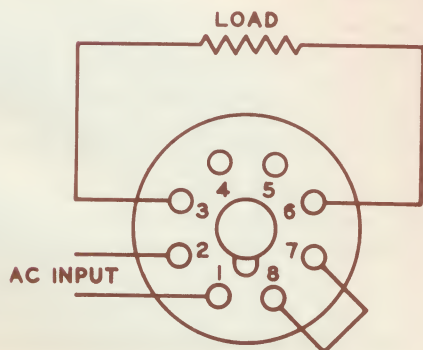
REMOTE SENSING, EXTERNAL ADJUST



NOTE — FOR ALL MODELS UP TO AND INCLUDING 6 AMPS, WITH OCTAL OUTPUT PLUG. CONSULT FACTORY FOR 12 AND 25 AMP MODELS. RI-500 OHM

POT FOR MODELS PREFIXED RA2 THRU RA8, RB2 THRU RB8, RA327 THRU RA385, RB327 THRU RB385. USE 5000 OHM POT FOR MODELS PREFIXED RA10 THRU RA295.

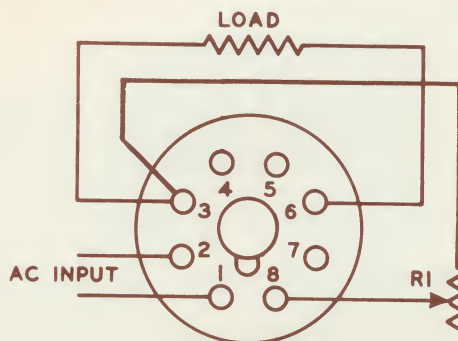
INTERNAL VOLTAGE ADJUST



RB SERIES

SEE NOTE

EXTERNAL VOLTAGE ADJUST



OUTPUT IMPEDANCE

The output impedance of Power/Mate power supply modules in the range of DC to 1000 CPS can be readily calculated according to the following relationship:

$$Z = K \frac{E}{I}$$

where E is the regulated DC output of the power supply module, I is the full load current rating of the module, and K is equal to the following:

SERIES	LOAD REGULATION	K FACTOR
RA, DRA	0.05%	0.001
RB, DRB	0.5%	0.01
RC	0.75%	0.015
RD	1.5%	0.03

Above one-thousand CPS, the output impedance rises by a factor of ten for each decade increase in frequency. For example, if the output impedance is calculated to be 0.001 ohms at DC to 1KC, then at ten KC it is 0.01 ohms, and at 100KC it is 0.1 ohms, etc. These are to be taken as an approximation. Many factors determine the true output impedance. Among them the output capacitance, length of output leads, and the specific frequency characteristic of the regulator semiconductors.

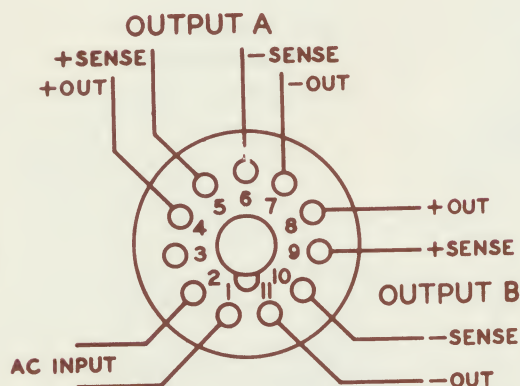
POWER SUPPLY WEIGHTS

The approximate weight of Power/Mate power supply modules is primarily determined by the case size as shown below. Consult the factory for the exact weight of any specific model.

For approximate shipping weight, increase the weights shown below by one-third.

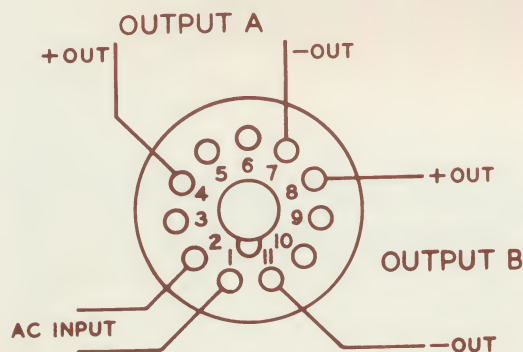
CASE SIZE	NET WEIGHT (pounds)	CASE SIZE	NET WEIGHT (pounds)
N	2¼	TH	9¼
R	3¾	2TH	16
RH	4¾	3TH	19
BRH	5½	4TH	35¾
T	8¾	5TH	38¾

DRA



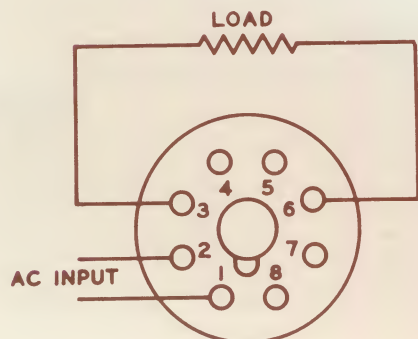
IF REMOTE SENSING IS NOT USED, CONNECT TERMINAL 4 TO 5, 6 TO 7, 8 TO 9, 10 TO 11.

DRB



OUTPUT A IS HIGHEST VOLTAGE SECTION. IF OUTPUTS ARE EQUAL VOLTAGE, THEN OUTPUT A IS THE HIGHEST CURRENT.

RC and RD



OVER-VOLTAGE PROTECTION. Additional charge 20% (\$35.00 min.).

Solid-state crow-bar protection for voltage sensitive loads is available for all RA and RB models. Trip point of crow-bar is adjustable. The addition of crow-bar circuitry generally requires next larger case size for N & R case supplies. Larger units can generally accommodate crow-bar circuitry. Consult factory for confirmation of case size when ordering. Add suffix V to model number when ordering.

CLOSE REGULATION. Additional charge \$10.00.

Regulation accuracies of $\pm 0.01\%$ for line and $\pm 0.025\%$ for load are possible for the RA series. When ordering add suffix A to model number.

208 or 230 VOLT INPUT. Additional charge 10% (\$15.00 min.). All modules can be modified to accept inputs of 208 or 230 volts, $\pm 10\%$. Add the suffix L for 208 volts, and LL for 230 volt operation.

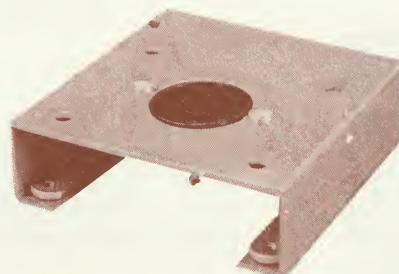
SOLDER TERMINALS. Additional charge \$5.00.

A solder header is available for any model normally supplied with an octal plug.

ACCESSORIES

PANEL & CHASSIS MOUNTING ADAPTER. This adapter permits any standard Power/Mate module to be surface mounted to either a chassis or panel. Includes socket. Order part no. A200- (—). Follow model no. with module case size with which adapter would be used. COST — ANY TYPE \$4.75.

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PANEL & CHASSIS MOUNTING ADAPTER



MODULE LAB ADAPTER

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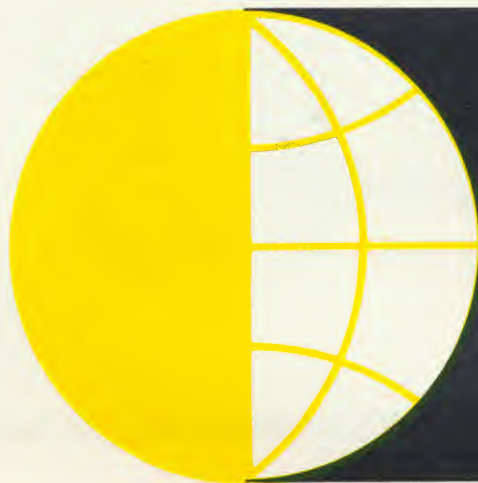
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Contact your nearest Power/Mate Corporation representative for quick, courteous application assistance. Should your area not be served by our representatives on the enclosed list, phone, write, or wire the factory directly. Power/Mate Corporation representatives are also listed in the EEM Directory and in VSMF for your convenience.

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